Ey Organizations in Renewable Energy Development

any organizations, businesses and state agencies share responsibility for positioning Iowa as a leader in renewable energy development. The integrated partnerships and cooperation among these organizations have propelled the growth of homegrown energy, moving it from research and demonstration to commercialization.

This chapter provides overviews of key governmental and nonprofit organizations working to develop renewable energy, including their goals and programs. This chapter is by no means all-inclusive (for example, it does not include private business and industry). However, the organizations highlighted in this section can provide the resources, information and contacts to assist those interested in Iowa's renewable energy industry. A more comprehensive contact list is provided on page 51 of this *Renewable Energy Resource Guide*.

Iowa Department of Natural Resources

The Energy and Waste Management Bureau of the Iowa Department of Natural Resources (DNR) serves as Iowa's state energy office. With a goal of advancing energy efficiency practices and renewable energy resources that are economically and environmentally sound, the Energy and Waste Management Bureau is responsible for recommending and implementing state energy policies. It also develops and facilitates renewable energy initiatives.

The DNR offers a team of program planners, data analysts and technical experts to create and facilitate renewable energy programs. Its primary strategy is to establish partnerships with state organizations, utilities, federal agencies, private businesses, research facilities, and other energy stakeholders to create effective energy initiatives.

Examples of the many programs the DNR has helped initiate can be found in descriptions of the individual resource chapters in this *Guide*. Important roles have included:

helping fund the feasibility study and installation of the Spirit Lake Community School District wind turbine, which was one of Iowa's first major wind energy production sites; assisting Governor Vilsack during his tenure as chair of the Governors' Ethanol Coalition; establishing partnerships and communication links for stakeholders working on methane recovery; and assisting with the state's agricultural energy management programs.

The Energy and Waste Management Bureau also serves as the state's manager of energy emergency preparedness and implements energy-efficiency programs.

> Iowa Department of Natural Resources Wallace State Office Building Des Moines, IA 50319-0034 Telephone: (515) 281-5918 Web site: www.state.ia.us/ dnr/energy E-mail: Sharon.Tahtinen@dnr.state.ia.us

Iowa Energy Center

The Iowa Energy Center (IEC), located in Ames, Iowa, is a research, demonstration and educational organization dedicated to increasing Iowa's energy efficiency and use of renewable energy. The IEC receives its funding from an annual assessment on the gross intrastate revenues of Iowa's gas and electric utilities.

In pursuit of its goals, the IEC has established an array of research and demonstration projects that address energy-related issues and the associated economic and environmental impacts. These projects are implemented through partnerships with universities and other research groups. IEC provides funding and technical assistance to these programs. Several of these projects are described throughout this *Guide*.

At the core of the IEC's projects are two





laboratories that research "real-world" applications. The Energy Resource Station in Ankeny, Iowa, serves as a testing site for energy efficiency demonstration projects. The Biomass Energy CONversion (BECON) facility in Nevada, Iowa, is a core site for the demonstration of biomass technologies.

Another important renewable energy mechanism at IEC is funding assistance. The Alternative Energy Revolving Loan Program (AERLP) provides low-interest loans to individuals and organizations interested in building Iowa-based renewable energy production facilities. The IEC also has a student scholarship program and provides grants for other energy-related programs in the state.

Iowa Energy Center 2521 Elwood Drive; Suite 124 Ames, IA 50010-8263 Telephone: (515) 294-8819 Web site:

www.energy.iastate.edu E-mail: iec@energy.iastate.edu

The Center for Energy and Environmental Education

The Center for Energy and Environmental Education (CEEE) seeks to enhance environmental learning within Iowa and the nation. Their goal is to encourage human behavior in harmony with the environment. CEEE focuses on educational and training programs for K-12, college students, professionals and the general public.

Located at the University of Northern Iowa (UNI) in Cedar Falls, CEEE has developed several educational tools and events that incorporate renewable energy in student learning. Among these activities are environmental curricula for K-12 teachers; the Iowa Energy Poster Contest for elementary students; and the Iowa Electrathon (developed with the Iowa Renewable Energy Association) teaching high school students about electric cars. CEEE also developed coursework on environmental studies for UNI students.

CEEE has been instrumental in many local and statewide energy initiatives, including the "greening" of the UNI campus, promoting efficiency to Iowa's churches, and teaching student interns to conduct energy audits in the Cedar Falls community through a program called Conservation City. This program is saving the community \$120,000 per year in energy costs, with an ultimate goal of \$3 million in annual energy savings.

Center for Energy and Environmental Education University of Northern Iowa Cedar Falls, IA 50614-0293 Telephone: (319) 273-2573 Web site: www.ceee.uni.edu/ E-mail:

William.Stigliani@uni.edu

Center for Global and Regional Environmental Research

Located at the University of Iowa, the Center for Global and Regional Environmental Research (CGRER) was established in 1990 to create programs addressing global environmental change. One of the organization's key strategies is promoting the advancement of renewable energy and energy efficiency.

CGRER receives its funding from an annual assessment on the gross intrastate revenues of Iowa's gas and electric utilities. Funds are used to support research by faculty and staff from Iowa's colleges and universities on global environmental change.

Research in renewable energy focuses on the environmental and economic benefits that can be achieved in Iowa. Under contract with the Iowa Department of Natural Resources, CGRER developed the Iowa Greenhouse Gas Action Plan. This document identifies 16 costeffective strategies that can save the state up to \$300 million annually from reduced energy costs, with potential additional savings of \$32 million annually from avoided emissions. Other CGRER projects include poplar tree research for biomass energy, buffer strip demonstration projects, and educational workshops on environmental issues.

> Center for Global and Regional Environmental Research 204 IATL Iowa City, IA 52242 Telephone: (319) 335-3333 Web site: www.cgrer.uiowa.edu/

> E-mail: jfrank@cgrer.uiowa.edu

Iowa Department of Agriculture and Land Stewardship

The Office of Renewable Fuels and Co-Products at the Iowa Department of Agriculture and Land Stewardship (IDALS) was established in 1991 to promote value-added agricultural products grown in Iowa.

IDALS provides technical and planning grants to innovative businesses that add value to Iowa's agricultural commodities. It also sponsors research and demonstration projects, and creates promotional and educational programs to inform the



public about value-added agricultural products. One of its priorities is to help develop renewable transportation fuel processing facilities and increase the successful growth of value-added companies.

Promotional efforts have included extensive ethanol newspaper and billboard campaigns, value-added videos, and publications and other advertising materials. Forty percent of the Office of Renewable Fuels' budget is dedicated to promotion, education and advertising of products that have their origin in Iowa agriculture.

Iowa Department of Agriculture and Land Stewardship The Office of Renewable Fuels and Co-Products Wallace State Office Building Des Moines, IA 50319 Telephone: (515) 281-6936 Web site: www.agriculture. state.ia.us/valadd.html E-mail:

pat.paustian@idals.state.ia.us

The Izaak Walton League of America

The Izaak Walton League of America (IWLA) is a national conservation organization whose members work to protect America's air, land, water and wildlife. The Iowa Division of IWLA is one of the largest state divisions with more than 5,000 members. It has been active in Iowa energy policy matters since 1992.

IWLA members believe the way people produce and use energy leaves a "footprint" on the natural world. In concert with IWLA's common-sense approach to conservation, members advance policies in Iowa that encourage greater reliance on renewable energy and energyefficiency practices.

IWLA has been active in numerous regulatory proceedings, working to preserve state laws that help Iowa develop its renewable energy resource base. IWLA believes its goal of diversifying the mix of energy resources can result in economical and environmental gains for the state of Iowa.

Izaak Walton League of America 321 E. Walnut, Suite 130 Des Moines, IA 50309-2048 Telephone (515) 883-2358 Web site: www.iowaikes.com E-mail: iowaikes@mcleodusa.net

Iowa Renewable Energy Association

Iowa Renewable Energy Association (I-Renew) is a nonprofit, grassroots organization dedicated to promoting and educating Iowans on renewable energy and energy conservation. Its goal is to achieve long-term social, environmental, and economical sustainability in Iowa. I-Renew collaborates with related organizations in Iowa and the United States.

Founded in 1992, I-Renew sponsors educational activities designed for individuals, farms, businesses, schools and utilities. The association consolidates and disseminates existing knowledge on renewables and conservation.

I-Renew educational and promotional activities include an annual two-day Iowa Renewable Energy Expo and Alternative Vehicle Showcase; workshops on renewable energy technologies; demonstrations of renewable-fuel vehicles; the *Iowa Sustainable Energy Sourcebook*— a

resource directory of individuals and organizations in renewable energy; and the Iowa Electrathon, a hands-on program teaching high school students about electric vehicles.

Iowa Renewable Energy Association P. O. Box 355 Muscatine, IA 52761-0355 Telephone: (563) 288-2552 Web site: www.irenew.org E-mail: irenew@irenew.org

The Iowa Sustainable Energy for Economic Development Coalition

The Iowa Sustainable Energy for Economic Development (ISEED) Coalition is an alliance of 19 consumer, environmental, low-income, educational and religious organizations — representing more than 160,000 Iowans — with common interests in developing "homegrown" sustainable energy sources benefiting Iowa's economy.

ISEED's goals are to decrease energy waste through conservation and efficiency, invest in sustainable forms of renewable energy, reduce reliance on imported fossil fuels, and maintain affordable energy prices and high-quality jobs in the state.

The organization is helping to develop renewable energy resources through citizen organizing, coalition building, community outreach, public education and media advocacy.

One of ISEED's long-term objectives is to promote a statewide renewable energy portfolio standard, requiring a percentage of the state's electricity be generated from renewable resources. The organization also works to establish secure funding



mechanisms for the renewable energy industry.

The Iowa Sustainable Energy for Economic Development Coalition 3520 Beaver Avenue, Suite D Des Moines, IA 50310 Telephone: (515) 277-5077 Web site: www.yawp.com/ican/ICAN.html E-mail: Ldaviscook@iowacan.org

Leopold Center for Sustainable Agriculture

The Leopold Center for Sustainable Agriculture was established by the Iowa Legislature as part of the Iowa Groundwater Protection Act of 1987. Its mandated missions are to identify impacts of agricultural practices, contribute to the development of profitable farming systems that conserve natural resources, and cooperate with Iowa State University Extension to inform the public of new findings.

The Center has an extensive competitive grants program, as well as a conference/workshop grants program, both of which encourage all types of resource management efforts. Grant proposals for research or demonstration projects in the area of renewable energy and sustainability are welcomed. The Center is

currently one of the funding agencies for the Chariton Valley Biomass Project, which promotes switchgrass as a viable agricultural commodity for farmers in southern Iowa. The Center has also funded several projects investigating the feasibility of composting to provide alternative energy sources.

Conserving resources while promoting a more sustainable agriculture are goals of the Leopold Center's numerous research, education and outreach efforts. Many alternative agricultural products and techniques investigated by the Center enhance profitability while offering producers opportunities to invest in sustainable forms of renewable energy.

Leopold Center for Sustainable Agriculture Iowa State University 209 Curtiss Hall Ames, Iowa 50011-1050 Telephone: (515) 294-3711 Web site:

www.leopold.iastate.edu E-mail: leocenter@iastate.edu

Office of Biorenewables Programs

Iowa State University established the Office of Biorenewables Programs in 2002 to develop cross-disciplinary research, education and extension programs that will support the emergence of a bio-based economy in Iowa. University units affiliated with the Office include the Center for Sustainable Environmental Technologies, the Biorenewable Resources Consortium, the Center for Designer Crops, the Center for Crops Utilization Research, and the Industries of the Future Program in the Center for Industrial Research and Service. The Iowa Energy Center, an external affiliate, will also participate by making available pilot-scale research and demonstration space at its **Biomass Energy Conversion Facility** in Nevada, Iowa.

The office also oversees a new graduate program in Biorenewable Resources and Technology, the first academic program in the United States to offer M.S. and Ph.D degrees in this new field. The program offers students advanced study in the use of plant- and crop-based resources for the production of bio-based products including fuels, chemicals, materials and energy.

Office of Biorenewables Programs Iowa State University 286 Metals Development Building Ames, IA 50011-3020 Telephone: (515) 294-6555 Web site:

www.csetweb.me.iastate.edu/biooffice.htm

E-mail: tmccarly@iastate.edu